

ABSTRACT

The invention provides an electromagnetic reciprocal drive mechanism having a movable part that is simple to manufacture, dimensionally stable and inexpensive. The device has: a permanent magnet cluster 3, and a spider 4 and retainer 5 that concentrically support the permanent magnet cluster 3, an outer laminated core 6 provided adjacent to the permanent magnet cluster 3, and an electromagnetic coil 8 wound around the outer laminated core 6. An adhesive paper sheet 13 having an adhesive layer 11 on an inner surface and which can be impregnated with an adhesive 12 is wrapped around an outer periphery of the permanent magnet cluster 3, the spider 4 and the retainer 5. The adhesive 12 is then impregnated into the adhesive paper sheet 13 and solidified. In the adhesive paper sheet 13 and the adhesive layer 11 is formed of a plurality of small holes. By impregnating application of a small amount of the adhesive 12 into the adhesive paper sheet 13 and then solidifying, the outer periphery of the spider 4, the retainer 5 and the permanent magnet cluster 3 is reinforced by the adhesive paper sheet 13. Therefore not only is manufacture simple, but it can be constructed inexpensively.